April 22, 2003

Mr. Ron Terrell
Milestone Contractors, L.P.
P.O. Box 421459
Indianapolis, Indiana 46242

Re: 107-16636
First Significant Revision to
FESOP 107-14098-03280

Dear Mr. Terrell:

Milestone Contractors, L.P. was issued a permit on February 20, 2002 for a stationary asphalt pavement production plant. A letter requesting changes to this permit was received on January 3, 2003. Pursuant to the provisions of 326 IAC 2-8-11.1 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of replacing the 72 MMBtu per hour dryer with a new 120 MMBtu per hour dryer.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Linda Quigley, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (973) 575-2555, extension 3284, or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
LQ/EVP
cc: File - Montgomery County
U.S. EPA, Region V
Montgomery County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michelle Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Milestone Contractors, L.P.
3500 U.S. 231 North
Crawfordsville, Indiana 47933

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F107-14098-03280	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 20, 2002 Expiration Date: February 20, 2007

First Significant Permit Revision No.: 107-16636-03280	Pages Affected: 5, 25-30, 32, 33, 38 and 39
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 22, 2003

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary asphalt pavement production plant.

Authorized Individual:	Ron Terrell, Senior Manager, Asphalt Plants
Source Address:	3500 U.S. 231 North, Crawfordsville, Indiana 47933
Mailing Address:	P.O. Box 421459, Indianapolis, Indiana 46242-1459
SIC Code:	2951
Source Location Status:	Montgomery County
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 285 tons per hour, equipped with one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of 120 million (MM) British thermal units (Btu) per hour, using No. 2 distillate fuel oil and natural gas as back-up fuels and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as SV1;
(b) one (1) drag slat conveyor, three (3) feed conveyors, and one (1) screen;
(c) one (1) liquid asphalt storage tank, identified as Tank 13A, with a maximum storage capacity of 30,000 gallons, exhausting at one (1) stack, identified as SV3;
(d) one (1) liquid asphalt storage tank, identified as Tank 13B, with a maximum storage capacity of 20,000 gallons, exhausting at one (1) stack, identified as SV4; and
(e) cold-mix (stockpile mix) asphalt storage piles.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) one (1) No. 2 distillate fuel oil fired hot oil heater, using natural gas as a back-up fuel, identified as emission unit No. 14, rated at 1.8 MMBtu per hr, exhausting at one (1) stack, identified as SV2;
(b) two (2) re-refined waste oil storage tanks, identified as Tanks 11A & 11B, each with a maximum storage capacity of 10,000 gallons, exhausting at two (2) stacks, identified as SV5 and SV6;
(c) one (1) No. 2 distillate oil storage tank, identified as Tank 12, with a maximum storage capacity of 12,000 gallons, exhausting at one (1) stack, identified as SV7;
(d) one (1) asphalt emulsion storage tank, identified as Tank 15, with a maximum storage capacity of 12,000 gallons, exhausting at one (1) stack, identified as SV8;

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 285 tons per hour, equipped with one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of 120 million (MM) British thermal units (Btu) per hour, using No. 2 distillate fuel oil and natural gas as back-up fuels and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as SV1;
(b) one (1) drag slat conveyor, three (3) feed conveyors, and one (1) screen;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart I.

(b) Pursuant to 40 CFR 60.7, Subpart A (General Provisions, Notification and Record Keeping), the owner or operator subject to the provisions of this part shall furnish the IDEM, OAQ written notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.

D.1.2 Particulate Matter (PM) [326 IAC 12] [40 CFR 60.90, Subpart I][326 IAC 2-2]

Pursuant to 326 IAC 12, (40 CFR Part 60.90, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the particulate matter emissions from the mixing and drying operations shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf). This is equivalent to a particulate matter emission rate of 9.45 pounds per hour. Based on 8,760 hours of operation per 12 consecutive month period, this limits PM emissions from the mixing and drying operations to 41.38 tons per year for a source-wide total potential to emit of less than 250 tons per year. Therefore, this limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate mixing and drying operation shall not exceed 0.066 pound of PM-10 per ton of asphalt mix. This is equivalent to a PM-10 emission limit of 18.78 pounds per hour, including both filterable and condensible fractions. Based on 8,760 hours of operation per 12 consecutive month period, this limits PM-10 emissions from the aggregate mixing and drying operation to 82.2 tons per year for a source-wide total potential to emit of less than 100 tons per year. Therefore, compliance with this limit will satisfy 326 IAC 2-8-4, and will render the Part 70 rules (326 IAC 2-7) not applicable. This limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.4 Opacity [326 IAC 12] [40 CFR 60.90, Subpart I]

Pursuant to 326 IAC 12, (40 CFR Part 60.92, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the mixing and drying operations shall not discharge or cause the discharge into the atmosphere any gases which exhibit 20% opacity or greater.

D.1.5 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1][326 IAC 7-2-1]

(a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 120 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% when using distillate oil.

(b) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 120 million Btu per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 1.3 percent when using re-refined waste oil. The source has accepted a sulfur content limit of 0.75 percent for re-refined waste oil.

(c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.6 Fuel Usage [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

(a) the sulfur content of the re-refined waste oil used in the 120 MMBtu per hour burner for the aggregate dryer shall not exceed 0.75 percent.

(b) the usage of re-refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents in the 120 MMBtu per hour burner for the aggregate dryer shall be limited to 1,710,658 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that SO_2 emissions are limited below 100 tons per year.

(c) For purposes of determining compliance, the following shall apply:

(1) every MMCF of natural gas burned shall be equivalent to 5.4 gallons of re-refined waste oil based on SO_2 emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified; and

(2) every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 644 gallons of re-refined waste oil based on SO_2 emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 will not apply. This limitation will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [40 CFR 60.8][326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) Within 60 days after achieving the maximum production rate at which the 120 MMBtu per hour dryer will be operated, but not later than 180 days after initial startup, in order to demonstrate compliance with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall perform PM and PM-10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5 for PM and methods as approved by the Commissioner for PM-10. PM-10 includes filterable and condensible PM-10.

(b) Opacity testing utilizing 40 CFR Part 60 Appendix A, Method 9, to demonstrate compliance with the opacity limitation of Condition D.1.4.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.9 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input when burning No. 2 distillate fuel oil and 1.6 pounds per million But heat input when burning re-refined waste oil by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 120 MMBtu per hour burner for the aggregate dryer, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.10 Particulate Matter (PM)

In order to comply with conditions D.1.2, D.1.3, and D.1.4, the baghouse for PM control shall be in operation and control emissions at all times when aggregate mixing and drying are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.11 Visible Emissions Notations

(a) Visible emission notations of the aggregate dryer/burner baghouse stack exhaust, and the conveyors and transfer points, shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the aggregate dryer/burner, at least once per shift when the aggregate dryer/burner is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.13 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the aggregate dryer/burner. All defective bags shall be replaced.

D.1.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.15 Record Keeping Requirements

(a) To document compliance with Conditions D.1.5 and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below.

(1) Calendar dates covered in the compliance determination period;

(2) Actual re-refined waste oil and re-refined waste oil equivalent usage per month since last compliance determination period and equivalent SO_2 emissions;

(3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications.

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) To document compliance with Condition D.1.11, the Permittee shall maintain records of visible emission notations of the aggregate dryer/burner baghouse stack exhaust once per shift.

(c) To document compliance with Condition D.1.12, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation.

(d) To document compliance with Condition D.1.13, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

D.1.17 Used Oil Requirements [329 IAC 13]

The waste oil burned in the dryer/mixer burner shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

(a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),

(b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and

(c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(e) cold-mix (stockpile mix) asphalt storage piles.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Volatile Organic Compound (VOC) [326 IAC 8-5-2] [326 IAC 2-8-4][326 IAC 2-2]

(a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), the use of cutback asphalt or asphalt emulsion shall not contain more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

(1) penetrating prime coating

(2) stockpile storage

(3) application during the months of November, December, January, February and March.

(b) Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3,407 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month. This is equivalent to limiting the VOC emitted from solvent use to 85.18 tons per twelve (12) consecutive month period, based on the following definition:

Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating.

Therefore, the requirements of 326 IAC 2-7 will not apply. This limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.2 Record Keeping Requirements

To document compliance with Condition D.3.1(b), the Permittee shall maintain records in accordance with (a) through (d) below. Records maintained for (a) through (d) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.3.1(b).

(a) Calendar dates covered in the compliance determination period;

(b) Gelled asphalt binder usage per month since the last compliance determination period;

(c) VOC solvent content by weight of the gelled asphalt binder used each month; and

(d) Amount of VOC solvent used in the production of cold mix asphalt, and the amount of VOC emitted each month.

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Milestone Contractors, L.P.
Source Address: 3500 U.S. 231 North, Crawfordsville, Indiana 47933
Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459
FESOP No.: F107-14098-03280
Facility: 120 MMBtu per hour aggregate dryer burner
Parameter: Re-refined waste oil and equivalent usage limit to limit SO_2 emissions
Limit: the usage of re-refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents in the 120 MMBtu per hour burner for the aggregate dryer shall be limited to 1,710,658 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.6(b) shall be used.

YEAR: _____

Month	Column 1		Column 2		Column 1 + Column 2	
	Re-refined waste oil and equivalent usage this month (gallons)		Re-refined waste oil and equivalent usage previous 11 months (gallons)		12 month total Re-refined waste oil and equivalent usage (gallons)	
	Waste Oil	Equiv.	Waste Oil	Equiv.	Waste Oil	Equiv.
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Milestone Contractors, L.P.
Source Address: 3500 U.S. 231 North, Crawfordsville, Indiana 47933
Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459
FESOP No.: F107-14098-03280
Facility: Cold Mix Asphalt Storage
Parameter: VOC
Limit: Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3,407 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month. This is equivalent to limiting the VOC emitted from solvent use to 85.18 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Total VOC Solvent Usage This Month (tons)	Total VOC Solvent Usage Previous 11 Months (tons)	12 Month Total VOC Solvent Usage (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Name:	**Milestone Contractors, L.P.**
Source Location:	**3500 U.S. 231 North, Crawfordsville, Indiana 47933**
County:	**Montgomery**
SIC Code:	**2951**
Operation Permit No.:	**F107-14098-03280**
Operation Permit Issuance Date:	**February 20, 2002**
Permit Revision No.:	**107-16636-03280**
Permit Reviewer:	**Linda Quigley/EVP**

On March 6, 2003, the Office of Air Quality (OAQ) had a notice published in the Journal Review, Crawfordsville, Indiana, stating that Milestone Contractors, L.P. had applied for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP) to replace the existing 74 MMBtu per hour dryer with a new 120 MMBtu per hour dryer. The notice also stated that OAQ proposed to issue a Significant Permit Revision for this operation and provided information on how the public could review the proposed Significant Permit Revision and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Permit Revision should be issued as proposed.

Upon further review, the OAQ has decided to make the following changes to the Significant Permit Revision. Bolded language has been added and the language with a line through it has been deleted.

(1) On March 3, 2003, U.S.EPA published a notice for "Conditional Approval of Implementation Plan: Indiana" in the Federal Register / Vol. 68, No.41 at pages 9892 through 9895. This notice grants conditional approval to the PSD State Implementation Plan (SIP) under provisions of 40 CFR §51.166 and 40 CFR §52.770 while superceding the delegated PSD SIP authority under 40 CFR §52.793. The effective date for these provisions is April 2, 2003. The following permit conditions have been revised based on the PSD SIP approval status (where language deleted is shown with strikeout):

D.1.2 Particulate Matter (PM) [326 IAC 12] [40 CFR 60.90, Subpart I][326 IAC 2-2]~~[40 CFR 52.21]~~

Pursuant to 326 IAC 12, (40 CFR Part 60.90, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the particulate matter emissions from the mixing and drying operations shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf). This is equivalent to a particulate matter emission rate of 9.45 pounds per hour. Based on 8,760 hours of operation per 12 consecutive month period, this limits PM emissions from the mixing and drying operations to 41.38 tons per year for a source-wide total potential to emit of less than 250 tons per year. Therefore, this limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) ~~and 40 CFR 52.21~~ not applicable.

D.1.3 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4][326 IAC 2-2]~~[40 CFR 52.21]~~

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate mixing and drying operation shall not exceed 0.066 pound of PM-10 per ton of asphalt mix. This is equivalent to a PM-10 emission limit of 18.78 pounds per hour, including both filterable and condensible fractions. Based on 8,760 hours of operation per 12 consecutive month period, this limits PM-10 emissions from the aggregate mixing and drying operation to 82.2 tons per year for a source-wide total potential to emit of less than 100 tons per year. Therefore, compliance with this limit will satisfy 326 IAC 2-8-4, and will render the Part 70 rules (326 IAC 2-7) not applicable. This limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) ~~and 40 CFR 52.21~~ not applicable.

D.1.6 Fuel Usage [326 IAC 2-8-4][326 IAC 2-2]~~[40 CFR 52.21]~~

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

(a) the sulfur content of the re-refined waste oil used in the 120 MMBtu per hour burner for the aggregate dryer shall not exceed 0.75 percent.

(b) the usage of re-refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents in the 120 MMBtu per hour burner for the aggregate dryer shall be limited to 1,710,658 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that SO_2 emissions are limited below 100 tons per year.

(c) For purposes of determining compliance, the following shall apply:

(1) every MMCF of natural gas burned shall be equivalent to 5.4 gallons of re-refined waste oil based on SO_2 emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified; and

(2) every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 644 gallons of re-refined waste oil based on SO_2 emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 will not apply. This limitation will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) ~~and 40 CFR 52.21~~ not applicable.

D.3.1 Volatile Organic Compound (VOC) [326 IAC 8-5-2] [326 IAC 2-8-4][326 IAC 2-2]~~[40 CFR 52.21]~~

(a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), the use of cutback asphalt or asphalt emulsion shall not contain more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

(1) penetrating prime coating

(2) stockpile storage

(3) application during the months of November, December, January, February and March.

(b) Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3,407 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month. This is equivalent to limiting the VOC emitted from solvent use to 85.18 tons per twelve (12) consecutive month period, based on the following definition:

Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating.

Therefore, the requirements of 326 IAC 2-7 will not apply. This limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) ~~and 40 CFR 52.21~~ not applicable.

(2) Condition D.1.15(c) Record Keeping Requirements has been corrected to state that the Permittee shall maintain once per shift records of the static pressure drop during normal operation as stated in Condition D.1.12 (Parametric Monitoring).

D.1.15 Record Keeping Requirements

(a) To document compliance with Conditions D.1.5 and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below.

(1) Calendar dates covered in the compliance determination period;

(2) Actual re-refined waste oil and re-refined waste oil equivalent usage per month since last compliance determination period and equivalent SO_2 emissions;

(3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications.

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) To document compliance with Condition D.1.11, the Permittee shall maintain records of visible emission notations of the aggregate dryer/burner baghouse stack exhaust once per shift.

(c) To document compliance with Condition D.1.12, the Permittee shall maintain ~~weekly~~ **once per shift** records of the total static pressure drop during normal operation.

(d) To document compliance with Condition D.1.13, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

(3) Condition D.1.17 has been revised to include the rule cite.

D.1.17 Used Oil Requirements **[329 IAC IAC 13]**

The waste oil burned in the dryer/mixer burner shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

(a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),

(b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and

(c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	**Milestone Contractors, L.P.**
Source Location:	**3500 U.S. 231 North, Crawfordsville, Indiana 47933**
County:	**Montgomery**
SIC Code:	**2951**
Operation Permit No.:	**F107-14098-03280**
Operation Permit Issuance Date:	**February 20, 2002**
Permit Revision No.:	**107-16636-03280**
Permit Reviewer:	**Linda Quigley/EVP**

The Office of Air Quality (OAQ) has reviewed a revision application from Milestone Contractors, L.P. relating to the operation of a stationary asphalt pavement production plant.

History

On January 3, 2003, Milestone Contractors, L.P. submitted an application to the OAQ requesting to replace the existing 74 MMBtu per hour dryer with a new 120 MMBtu per hour dryer. In addition, the source replaced the existing 2.115 MMBtu per hour hot oil heater with a new 1.8 MMBtu per hour hot oil heater. The replacement of the hot oil heater did not require prior notice pursuant to 326 IAC 2-8-11.1(b)(1), however the descriptive changes will be incorporated with this Significant Permit Revision. Milestone Contractors, L.P. was issued a FESOP renewal on February 20, 2002.

New Emission Units and Pollution Control Equipment

one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 285 tons per hour, equipped with one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of 120 million (MM) British thermal units (Btu) per hour, using No. 2 distillate fuel oil and natural gas as back-up fuels and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as SV1;

Existing Approvals

The source was issued a FESOP renewal (F107-14098-03280) on February 20, 2002.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 3, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations, (pages 1 through 7).

Unrestricted Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	265.46
PM-10	211.54
SO_2	482.90
VOC	4.38
CO	44.15
NO_x	83.22

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Aresenic	less than 10
Beryllium	less than 10
Cadmium	less than 10
Chromium	less than 10
Lead	less than 10
Manganese	less than 10
Mercury	less than 10
Nickel	less than 10
Selenium	less than 10
TOTAL	less than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM_{10}, SO_2, CO and NO_X from this modification are equal to or greater than 25 tons per year. Therefore, the FESOP is being revised through a Significant Permit Revision pursuant to 326 IAC 2-8-11.1. This FESOP Significant Permit Revision will give the source approval to construct and operate the new emission units.

The source has agreed to limit PM_{10} and SO_2. Therefore, 326 IAC 2-8 will apply.

(b) Fugitive Emissions
Since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability. This source is not one of the 28 listed source categories under 326 IAC 2-2 (PSD).

Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Potential to Emit After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Aggregate Dryer and Burner (1)	41.38(2)	82.20(3)	94.30	13.77	44.15	52.56	12.22
Hot Oil Heater	0.13	0.22	4.70	0.05	0.78	1.32	negligible
Conveying/Handling	2.56	1.21	-	-	-	-	-
Unpaved Roads(4)	73.05	15.03	-	-	-	-	-
Aggregate Storage	0.86	0.30	-	-	-	-	-
Cold-mix VOC storage(5)	-	-	-	85.18	-	-	-
Total PTE After Issuance	117.98	99.0	99.0	99.0	44.93	53.88	12.22

(1) Limited PTE reflects fuel oil usage limitation in order to comply with 326 IAC 2-8 (FESOP) in condition D.1.6.
(2) Maximum allowable PM emissions pursuant to 40 CFR 60.90, Subpart I as listed in condition D.1.2.
(3) Maximum allowable PM10 emissions in order to comply with 326 IAC 2-8 (FESOP) as listed in condition D.1.3.
(4) Potential to emit after controls.
(5) Maximum allowable VOC emissions in order to comply with 326 IAC 2-8 (FESOP) as listed in condition D.3.1.

County Attainment Status

The source is located in Montgomery County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Montgomery County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) This modification to an existing source is still subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.90, Subpart I) because it meets the definition of a hot mix asphalt facility pursuant to the rule and it was modified after June 11, 1973. This rule limits particulate matter emissions to 0.04 grains per dry standard cubic foot (gr/dscf) and also limits visible emissions to 20% opacity. This is equivalent to a particulate matter emission rate of 9.45 pounds per hour. The source will comply with this rule by using a baghouse to limit particulate matter emissions to less than 0.04 gr/dscf (see Appendix A, page 5 of 7, for detailed calculations).

(b) This modification to an existing source is subject to 40 CFR 60.7, Subpart A (General Provisions, Notification and Record Keeping). Pursuant to this rule, the owner or operator of the 120 MMBtu/hr dryer shall furnish the IDEM, OAQ written notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 60.14(e).

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not subject to the requirements of this rule. As shown in the Potential to Emit After Issuance table on page 3 above, the allowable emissions of all regulated pollutants are less than 250 tons per year after application of all federally enforceable emission limits. This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), which would require the source to submit an annual emission statement. Pursuant to this rule, any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. This source, which is located in Montgomery County, has accepted federally enforceable operation conditions which limit emissions of PM-10, SO_2, and VOC to below 100 tons per year per pollutant, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the usage of re-refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents shall be limited to 1,710,658 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that SO_2 emissions are limited to less than 100 tons per year. The use of gelled asphalt with solvent liquid binder shall not exceed 3,407 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month, so that VOC emissions are limited to less than 100 tons per year. Also, PM-10 emissions from the aggregate dryer shall be limited to 0.066 pound PM-10 per ton of asphalt mix equivalent to 18.78 pounds per hour. Based on 8,760 hours of operation per 12 consecutive month period, this limits PM-10 emissions from the aggregate mixing and drying operation to 82.2 tons per year for a source-wide total potential to emit of less than 100 tons per year. The source will comply with the PM-10 emission limit by utilizing a baghouse for controlling PM-10 emissions to less than 18.78 pounds per hour from the aggregate dryer. Therefore, the requirements of 326 IAC 2-7 do not apply. These emission limitations also render the requirements of 326 IAC 2-2 (PSD) not applicable.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is subject to 326 IAC 6-5 for fugitive particulate matter emissions. Pursuant to 326 IAC 6-5, for any new source which has not received all the necessary preconstruction approvals before December 13, 1985, a fugitive dust control plan must be submitted, reviewed and approved. The fugitive dust control plan for this source includes the following:

(a) Fugitive particulate matter emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following methods:

Paved roads and parking lots:

(1) power brooming while wet either from rain or application of water on an as needed basis.

Unpaved roads and parking lots:

(1) paving with asphalt;
(2) treating with emulsified asphalt on an as needed basis;
(3) treating with water on an as needed basis;
(4) double chip and seal the road surface and maintained on an as needed basis.

(b) Fugitive particulate matter emissions from aggregate stockpiles shall be controlled by one or more of the following methods on an as needed basis:

(1) maintaining minimum size and number of stock piles of aggregate;
(2) treating around the stockpile area with emulsified asphalt;
(3) treating around the stockpile area with water;
(4) treating the stockpiles with water.

(c) Fugitive particulate matter emissions from outdoor conveying of aggregates shall be controlled by the following method on an as needed basis:

(1) applying water at the feed and the intermediate points.

(d) Fugitive particulate matter emissions from the transfer of aggregates shall be controlled by one of the following methods:

(1) minimize the vehicular distance between transfer points;
(2) enclose the transfer points;

(3) apply water on transfer points on an as needed basis.

(e) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by one of the following methods:
(1) tarping the aggregate hauling vehicles;
(2) maintain vehicle bodies in a condition to prevent leakage;
(3) spray the aggregates with water;
(4) maintain a 10 MPH speed limit in the yard.

(f) Fugitive particulate matter emissions from the loading and unloading of aggregate shall be controlled by one of the following methods:
(1) reduce free fall distance to a minimum;
(2) reduce the rate of discharge of the aggregate;
(3) spray the aggregate with water on an as needed basis.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

The aggregate mixing and drying operation is not subject to the requirements of 326 IAC 6-3-2. This rule does not apply if the limitation established in the rule is not consistent with applicable limitations in 326 IAC 6-1 or 326 IAC 12. Since the applicable PM emission limit established by 326 IAC 12, 40 CFR 60, Subpart I (9.45 pounds per hour), is less than the PM limit that would be established by 326 IAC 6-3-2 (62.42 pounds per hour, see Appendix A, page 5 of 7), the more stringent limit applies and the limit pursuant to 326 IAC 6-3-2 does not apply.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The sulfur dioxide emissions from the 120 MMBtu/hr dryer burning distillate oil shall be limited to 0.5 lb/MMBtu heat input. This equates to a distillate fuel oil sulfur content limit of 0.5%. Therefore, the sulfur content of the distillate fuel must be less than or equal to 0.5% in order to comply with this rule (See Appendix A, Page 5 of 7 for detailed calculations). The source will comply with this rule by using No. 2 distillate oil with a sulfur content of 0.5% or less. The sulfur dioxide emissions from the 120 MMBtu/hr dryer burning re-refined waste oil shall be limited to 1.6 lb/MMBtu/hr heat input. This equates to a waste oil sulfur content limit of 1.3%. Therefore, the sulfur content of the waste oil must be less than or equal to 1.3% in order to comply with this rule (See Appendix A, Page 5 of 7 for detailed calculations). The source will comply with this rule by using re-refined waste oil with a sulfur content of 0.75%.

326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

This source is subject to 326 IAC 7-1 for the 120 MMBtu per hour dryer. As such, and pursuant to 326 IAC 7-2 (Compliance), the source shall demonstrate compliance with the 326 IAC 7-1 SO_2 emission limitation by recording, and submitting to the OAQ upon request, the information as specified, including fuel sulfur content, heat content, fuel consumption, and sulfur dioxide emission rates based on a calendar-month average. This source will continue to comply with this requirement.

326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

This rule applies to any paving application anywhere in the state. No person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

1) penetrating prime coating
2) stockpile storage
3) application during the months of November, December, January, February and March.

This source uses gelled asphalt to manufacture stockpile mix on a limited basis. The gelled asphalt contains less than 7% oil distillate by volume. It is only manufactured during the winter months and is in compliance with 326 IAC 8-5-2.

329 IAC 13-8 (Used Oil Requirements)

(a) Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

(1) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),

(2) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and

(3) Maintain records pursuant to 329 IAC 13-8-6 (Tracking).

(b) The waste oil burned in the dryer/mixer burner shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). The burning of mixtures of used oil and hazardous waste that is regulated by 329 IAC 3.1 is prohibited at this source.

Testing Requirements

This source is subject to 40 CFR 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), and shall comply with the particulate matter (PM) and opacity compliance testing requirements of the rule for the drum-mix plant. OAQ has also required PM-10 testing to demonstrate FESOP compliance.

Pursuant to 40 CFR 60.8, Subpart A (General Provisions, Performance Tests), within 60 days after achieving the maximum production rate at which the 120 MMBtu per hour dryer will be operated, but not later than 180 days after initial startup, the owner or operator of the 120 MMBtu per hour dryer shall conduct PM, PM10 and opacity performance tests.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The conveying, material transfer points, screening, unpaved roads, storage piles, mixing and drying operation have applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the aggregate dryer/burner baghouse stack exhaust, and the conveyors, transfer points, aggregate storage piles, and unpaved roads, shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

   (b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the aggregate dryer/burner, at least once per shift when the aggregate dryer/burner is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

   (c) An inspection shall be performed each calender quarter of all bags controlling the aggregate dryer/burner. All defective bags shall be replaced.

   (d) In the event that bag failure has been observed:

      (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(2) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for the aggregate dryer/burner must operate properly to ensure compliance with 326 IAC 12, 40 CFR 60.90, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities) and 326 IAC 2-8 (FESOP).

Changes Proposed

The changes listed below have been made to the Federally Enforceable State Operating Permit (F107-14098-03280). Bolded language has been added and the language with a line through it has been deleted.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 285 tons per hour, equipped with one (1) ~~natural gas fired~~ **re-refined waste oil fired** aggregate dryer burner with a maximum rated capacity of ~~74.0461~~ **120** million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and~~re-refined waste oil~~ **natural gas** as back-up fuels and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as SV1;
(b) one (1) drag slat conveyor, three (3) feed conveyors, and one (1) screen;
(c) one (1) liquid asphalt storage tank, identified as Tank 13A, with a maximum storage capacity of 30,000 gallons, exhausting at one (1) stack, identified as SV3;
(d) one (1) liquid asphalt storage tank, identified as Tank 13B, with a maximum storage capacity of 20,000 gallons, exhausting at one (1) stack, identified as SV4; and
(e) cold-mix (stockpile mix) asphalt storage piles.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 285 tons per hour, equipped with one (1) ~~natural gas fired~~ **re-refined waste oil fired** aggregate dryer burner with a maximum rated capacity of ~~74.0461~~ **120** million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and~~re-refined waste oil~~ **natural gas** as back-up fuels and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as SV1;
(b) one (1) drag slat conveyor, three (3) feed conveyors, and one (1) screen;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart I.

(b) **Pursuant to 40 CFR 60.7, Subpart A (General Provisions, Notification and Record Keeping), the owner or operator subject to the provisions of this part shall furnish the IDEM, OAQ written notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.**

D.1.5 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1][326 IAC 7-2-1]

(a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the ~~74.0461~~ **120** million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% when using distillate oil.

(b) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the ~~74.0461~~ **120** million Btu per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 1.3 percent when using re-refined waste oil. The source has accepted a sulfur content limit of 0.75 percent for re-refined waste oil.

(c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.6 Fuel Usage [326 IAC 2-8-4][326 IAC 2-2][40 CFR 52.21]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

(a) the sulfur content of the re-refined waste oil used in the ~~74.0461~~ **120** MMBtu per hour burner for the aggregate dryer shall not exceed 0.75 percent.

(b) the usage of re-refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents in the ~~74.0461~~ **120** MMBtu per hour burner for the aggregate dryer shall be limited to 1,710,658 U.S. gallons per twelve (12) consecutive month period, ~~rolled on a monthly basis~~, **with compliance determined at the end of each month**, so that SO_2 emissions are limited below 100 tons per year.

(c) For purposes of determining compliance, the following shall apply:

(1) every MMCF of natural gas burned shall be equivalent to 5.4 gallons of re-refined waste oil based on SO_2 emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified; and

(2) every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 644 gallons of re-refined waste oil based on SO_2 emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 will not apply. This limitation will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 40 CFR 52.21 not applicable.

D.1.8 Testing Requirements [40 CFR 60.8][326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) ~~During the period between 30 and 36 months after issuance of this permit,~~ **Within 60 days after achieving the maximum production rate at which the 120 MMBtu per hour dryer will be operated, but not later than 180 days after initial startup**, in order to demonstrate compliance with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall perform PM and PM-10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5 for PM and methods as approved by the Commissioner for PM-10. PM-10 includes filterable and condensible PM-10.

(b) Opacity testing utilizing 40 CFR Part 60 Appendix A, Method 9, to demonstrate compliance with the opacity limitation of Condition D.1.4.

D.1.9 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input when burning No. 2 distillate fuel oil and 1.6 pounds per million But heat input when burning re-refined waste oil by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the ~~74.0461~~ **120** MMBtu per hour burner for the aggregate dryer, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.13 Baghouse Inspections

An inspection shall be performed of each calendar quarter of all bags controlling the aggregate dryer/burner ~~when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors~~. All defective bags shall be replaced.

D.1.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, **if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then** failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.15 Record Keeping Requirements

(a) To document compliance with Conditions D.1.5 and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below.

(1) Calendar dates covered in the compliance determination period;

(2) Actual re-refined waste oil and re-refined waste oil equivalent usage per month since last compliance determination period and equivalent SO_2 emissions;

(3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications.

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) To document compliance with Condition D.1.11, the Permittee shall maintain records of visible emission notations of the aggregate dryer/burner baghouse stack exhaust once per shift.

(c) To document compliance with Condition D.1.12, the Permittee shall maintain ~~the following:~~ **weekly records of the total static pressure drop during normal operation.**

~~(1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:~~

~~(A) Inlet and outlet differential static pressure; and~~

~~(B) Cleaning cycle operation.~~

(d) To document compliance with Condition D.1.13, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Volatile Organic Compound (VOC) [326 IAC 8-5-2] [326 IAC 2-8-4][326 IAC 2-2][40 CFR 52.21]

(a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), the use of cutback asphalt or asphalt emulsion shall not contain more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

(1) penetrating prime coating

(2) stockpile storage

(3) application during the months of November, December, January, February and March.

(b) Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed ~~3,451~~ **3,407** tons of VOC solvent per twelve (12) consecutive month period, **with compliance determined at the end of each month**. This is equivalent to limiting the VOC emitted from solvent use to ~~86.28~~ **85.18** tons per twelve (12) consecutive month period, based on the following definition:

Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating.

Therefore, the requirements of 326 IAC 2-7 will not apply. This limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 40 CFR 52.21 not applicable.

In addition to the above revisions, Milestone Contractors, L.P. stated that the existing 2.115 MMBtu per hour hot oil heater was replaced with a new 1.8 MMBtu per hour hot oil heater. This is a change to an insignificant activity which does not affect any of the current emission limits. The following revision has been made to the Federally Enforceable State Operating Permit (F107-14098-03280):

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) one (1) No. 2 distillate fuel oil fired hot oil heater, using natural gas as a back-up fuel, identified as emission unit No. 14, rated at ~~2.115~~ **1.8** MMBtu per hr, exhausting at one (1) stack, identified as SV2;

Conclusion

This permit revision shall be subject to the conditions of the attached proposed **FESOP Permit Revision No. 107-16636-03280**.

Company Name: Milestone Contractors, L.P.
Plant Location: 3500 U.S. 231 North, Crawfordsville, Indiana 47933
County: Montgomery
Date Received: January 3, 2003
Permit Reviewer: Linda Quigley/EVP

**** aggregate dryer burner****

The following calculations determine the amount of emissions created by natural gas combustion, from the aggreg dryer burner, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combus Tables 1.4-1 and 1.4-2.

Criteria Pollutant: 120 MMBtu/hr * 8,760 hr/yr / 1000 Btu/cf * 2,000 lb/ton * Ef (lb/MMcf) = (ton/yr)

P M:	1.9	lb/MMcf =	**1.00 ton/yr**
P M-10:	7.6	lb/MMcf =	**3.99 ton/yr**
S O 2:	0.6	lb/MMcf =	**0.32 ton/yr**
N O x:	100.0	lb/MMcf =	**52.56 ton/yr**
V O C:	5.5	lb/MMcf =	**2.89 ton/yr**
C O:	84.0	lb/MMcf =	**44.15 ton/yr**

The following calculations determine the amount of emissions created by the combustion of #2 distillate fuel oil @ 0.5 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-1, 1.3-2, and 1.3-3.

Criteria Pollutant: 120 MMBtu/hr * 8,760 hr/yr / 140,000 Btu/gal * 2,000 lb/ton * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0	lb/1000 gal =	**7.51 ton/yr**
P M-10:	3.3	lb/1000 gal =	**12.39 ton/yr**
S O 2:	71.0	lb/1000 gal =	**266.55 ton/yr**
N O x:	20.0	lb/1000 gal =	**75.09 ton/yr**
V O C:	0.34	lb/1000 gal =	**1.28 ton/yr**
C O:	5.0	lb/1000 gal =	**18.77 ton/yr**

The following calculations determine the amount of emissions created by re-refined waste oil @ 0.75 % sulfur, 0.947 % ash, based on 8760 hours of use and US EPA's AP-42, 5th Edition, Section 1.11 - Waste Oil Combustion, Tables 1.11-1, 1.11-2, and 1.1

Criteria Pollutant: 120 MMBtu/hr * 8760 hr/yr / 120,000 Btu/gal * 2000 lb/ton * Ef (lb/1000 gal) = (ton/yr)

P M:	60.6	lb/1000 gal =	**265.46 ton/yr**
P M-10:	48.3	lb/1000 gal =	**211.54 ton/yr**
S O 2:	110.3	lb/1000 gal =	**482.90 ton/yr**
N O x:	19.0	lb/1000 gal =	**83.22 ton/yr**
V O C:	1.0	lb/1000 gal =	**4.38 ton/yr**
C O:	5.0	lb/1000 gal =	**21.90 ton/yr**

The maximum potential emissions from the aggregate dryer burner due to fuel combustion are the following:

Criteria Pollutant:		**Worst Case Fuel**
P M:	**265.46 ton/yr**	Re-refined Waste Oil
P M-10:	**211.54 ton/yr**	Re-refined Waste Oil
S O 2:	**482.90 ton/yr**	Re-refined Waste Oil
N O x:	**83.22 ton/yr**	Re-refined Waste Oil
V O C:	**4.38 ton/yr**	Re-refined Waste Oil

C O:	**44.15 ton/yr**	Natural Gas	

*** * source emissions after controls * ***

Pursuant to the FESOP program, this facility must limit PM-10, SO2, and VOC emissions to less than 100.0 tons pe
Consequently, SO2 emissions from the aggregate dryer must be limited to 94.3 tons per year (99.0 ton/yr - 4.7 ton/yr
from the hot oil heater).

* Emissions of PM and PM-10 from aggregate drying operations are controlled with a 99.885 % control eff

The following calculations determine the amount of emissions created by natural gas combustion
based on a fuel usage limitation of 1,051,200,000 cf

Natural Gas: 1,051,200 MMcf/yr / 2,000 lb/ton * Ef (lb/MMcf) = (ton/yr)

P M:	1.9 lb/MMcf =	**1.1E-03 ton/yr ***
P M-10:	7.6 lb/MMcf =	**4.6E-03 ton/yr ***
S O 2:	0.6 lb/MMcf =	**0.32 ton/yr**
N O x:	100.0 lb/MMcf =	**52.56 ton/yr**
V O C:	5.5 lb/MMcf =	**2.89 ton/yr**
C O:	84.0 lb/MMcf =	**44.15 ton/yr**

The following calculations determine the amount of emissions created by No.2 distillate fuel oil @ 0.5
based on a fuel usage limitation of 2,656,338 gal/yr:

No. 2 Distillate Oil: 2,656,338 gal/yr / 2,000 lb/ton * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0 lb/1000 gal =	**3.1E-03 ton/yr ***
P M-10:	3.3 lb/1000 gal =	**5.0E-03 ton/yr ***
S O 2:	71.0 lb/1000 gal =	**94.30 ton/yr**
N O x:	20.0 lb/1000 gal =	**26.56 ton/yr**
V O C:	0.3 lb/1000 gal =	**0.45 ton/yr**
C O:	5.0 lb/1000 gal =	**6.64 ton/yr**

The following calculations determine the amount of emissions created by re-refined waste oil @ 0.75
based on a fuel usage limitation of 1,710,658 gal/yr:

Waste Oil: 1,710,658 gal/yr / 2000 lb/ton * Ef (lb/1000 gal) = (ton/yr)

P M:	60.6 lb/1000 gal =	**0.06 ton/yr ***
P M-10:	48.3 lb/1000 gal =	**0.05 ton/yr ***
S O 2:	110.3 lb/1000 gal =	**94.30 ton/yr**
N O x:	19.0 lb/1000 gal =	**16.25 ton/yr**
V O C:	1.0 lb/1000 gal =	**0.86 ton/yr**
C O:	5.0 lb/1000 gal =	**4.28 ton/yr**

Criteria Pollutant:

		Worst Case Fuel
P M:	**0.06 ton/yr ***	Re-refined Waste Oil
P M-10:	**0.05 ton/yr ***	Re-refined Waste Oil
S O 2:	**94.30 ton/yr**	No. 2 Fuel Oil / Re-refined Waste Oil
N O x:	**52.56 ton/yr**	Natural Gas
V O C:	**2.89 ton/yr**	Natural Gas
C O:	**44.15 ton/yr**	Natural Gas

*** * source emissions after controls * ***

Fuel Usage Limitations

Fuel Oil: #2 distillate fuel oil

94.3	tons SO2/year limited	*	7508.57	Kgals	=	2656.338
266.55	tons SO2/year potential			year potential		

Fuel Oil: re-refined waste oil

94.3	tons SO2/year limited	*	8760.00	Kgals	=	1710.658
482.90	tons SO2/year potential			year potential		

Fuel equivalence for re-refined waste oil is determined from the limiting pollutant, SO2, as follows:

0.6	lb/MMcf =	5.4	gallons per million cubic feet (MMcf) natural gas (i.e., every 1 MMcf r
110.3	lb/1000 gal		gas burned is equivalent to 5.4 gallons of oil burned, based on SO2
71.0	lb/1000 gal =	644.0	gallons per 1000 gallons No. 2 distillate oil (i.e., every 1000 gallons c
110.3	lb/1000 gal		burned is equivalent to 644 gallons of waste oil burned, based on SC

Applying the equivalency ratios, the amount of equivalent fuels that could be burned are:

1,710.7	kgal/yr /	5.4	gallon/MMcf =	314,333.3	MMcf/year equivalent as natural gas
1,710.7	kgal/yr /	644.0	gallon/kgal =	2,656.3	kgal/year equivalent as No. 2 distillate

The equivalent fuel usage amount for natural gas exceeds the potential natural gas usage in the dryer burner. Since the potential fuel usage cannot be exceeded, no natural gas usage limit was created.

*** * source emissions after controls * ***

	hot oil heater:		nonfugitive		
P M:	0.13 ton/yr x	100%	emitted after controls =	**0.13**	**ton/yr**
P M-10:	0.22 ton/yr x	100%	emitted after controls =	**0.22**	**ton/yr**
	aggregate drying:		nonfugitive		
P M:	34,953 ton/yr x	0.11%	emitted after controls =	**40.20**	**ton/yr**
P M-10:	8,114 ton/yr x	0.11%	emitted after controls =	**9.33**	**ton/yr**
VOC:	10.88 ton/yr x	100%	emitted after controls =	**10.88**	**ton/yr**
	conveying & handling:		fugitive		
P M:	2.56 ton/yr x	50%	emitted after controls =	**1.28**	**ton/yr**
P M-10:	1.21 ton/yr x	50%	emitted after controls =	**0.61**	**ton/yr**
	unpaved roads:		fugitive		
P M:	146.10 ton/yr x	50%	emitted after controls =	**73.05**	**ton/yr**
P M-10:	30.07 ton/yr x	50%	emitted after controls =	**15.03**	**ton/yr**
	storage piles:		fugitive		
P M:	0.86 ton/yr x	50%	emitted after controls =	**0.43**	**ton/yr**
P M-10:	0.30 ton/yr x	50%	emitted after controls =	**0.15**	**ton/yr**
	cold mix VOC storage:		fugitive		
VOC:	624.15 ton/yr x	14%	emitted after controls =	**85.18**	**ton/yr***

* This is equivalent to 3,407 tons of gelled asphalt binder solvent used per year based on 2.5% of VOC solvent evaporating.

*** * summary of source emissions after controls * ***

Criteria Pollutant:	**Non-Fugitive**	**Fugitive**	**Total**
PM:	**40.38 ton/yr**	**74.76 ton/yr**	**115.15 ton/yr**
PM-10:	**9.60 ton/yr**	**15.79 ton/yr**	**25.39 ton/yr**
S O 2:	**99.00 ton/yr**	**0.00 ton/yr**	**99.00 ton/yr**
N O x:	**53.88 ton/yr**	**0.00 ton/yr**	**53.88 ton/yr**
V O C:	**13.82 ton/yr**	**85.18 ton/yr**	**99.00 ton/yr**
C O:	**44.93 ton/yr**	**0.00 ton/yr**	**44.93 ton/yr**

*** * miscellaneous * ***

326 IAC 7 Compliance Calculations:

The following calculations determine the maximum sulfur content of distillate fuel oil allowable by 326 IAC 7:

0.5 lb/MMBtu x 140,000 Btu/gal= 70 lb/1000gal

70 lb/1000gal / 142 lb/1000 gal = 0.5 %

Sulfur content must be less than or equal to 0.5% to comply with 326 IAC 7.

The following calculations determine the maximum sulfur content of waste (residual) oil allowable by 326 IAC 7:

1.6 lb/MMBtu x 120,000 Btu/gal= 192 lb/1000gal

192 lb/1000gal / 147 lb/1000 gal = 1.3 %

Sulfur content must be less than or equal to 1.3% to comply with 326 IAC 7.

326 IAC 6-3-2 Compliance Calculations:

The following calculations determine compliance with 326 IAC 6-3-2 for process weight rates in excess of 30 tons pe

limit = 55 * (285 ^ 0.11) - 40 = 62.42 lb/hr or
273.41 ton/yr

Since the emission limit pursuant to Subpart I of 41.38 tons per year, is more stringent than this limit, the limit pursua
326 IAC 6-3-2 does not apply. The emission limit pursuant to Subpart I shall also render the requirements of
326 IAC 2-2 (PSD) not applicable.

PM-10 Emission Limit:

(99.0 tons PM-10/yr - 16.76 tons PM-10/yr from other souces)
= 82.2 tons PM-10/yr = 18.78 lbs/hr
PM-10 emissions from the aggregate dryer are controlled to 9.33 tons/yr < 82.2 tons/yr (Will comply)
Based on a maximum asphalt mix throughput of 285 tons/hr, this emission limit is equivalent to 0.066 lb PM10 per tor
asphalt mix.

40 CFR Part 60.90, Subpart I (Standards of Performance for Hot Mix Asphalt Plants) Compliance Calculations

The following calculations determine compliance with NSPS, which limits stack emissions
from asphalt plants to 0.04 gr/dscf:

$$\frac{40.20 \text{ ton/yr} * 2000 \text{ lb/ton} * 7000 \text{ gr/lb}}{525{,}600 \text{ min/yr} * 27{,}555 \text{ dscf/min}} = 0.039 \text{ gr/dscf}$$

Allowable particulate emissions under NSPS equate to 41.38 tons per year. 9.45

Note:
SCFM = 38,880 acfm * (460 + 68) / (460 + 285)
= 27,555 scfm

Hazardous Air Pollutants (HAPs)

**** aggregate dryer burner****

The following calculations determine the amount of HAP emissions created by the combustion of distillate fuel oil b
& after controls @ 0.50 % sulfur, from the aggregate dryer burner, based on 8760 hours of use and
US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Table 1.3-11.

Hazardous Air Pollutants (HAPs): 120 MMBtu/hr * 8760 hr/yr / 2,000 lb/ton * Ef (lb/10^12 Btu) = (ton/

			Potential To Emit		Limited E
Arsenic:	4	lb/10^12 Btu =	2.10E-03	ton/yr	2.42E-06
Beryllium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.81E-06
Cadmium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.81E-06
Chromium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.81E-06
Lead:	9	lb/10^12 Btu =	4.73E-03	ton/yr	5.44E-06
Manganese:	6	lb/10^12 Btu =	3.15E-03	ton/yr	3.63E-06
Mercury:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.81E-06
Nickel:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.81E-06
Selenium:	15	lb/10^12 Btu =	7.88E-03	ton/yr	9.07E-06
		Total HAPs =	1.79E-02	ton/yr	2.06E-05

The following calculations determine the amount of emissions created by re-refined waste oil combustion, from asp
heating, @ 0.0089 % lead, based on 8760 hours of use and US EPA's AP-42, 5th Edition,
Section 1.11 - Waste Oil Combustion, Tables 1.11-1, 1.11-2, and 1.11-3.

Hazardous Air Pollutants (HAPs): 120 MMBtu/hr * 8760 hr/yr / 120,000 Btu/gal * 2000 lb/ton *1000 gal/kgal * Ef (lb/1000 gal) = (ton/y

			Potential To Emit		Limited E
Lead:	0.4895	lb/1000 gal =	2.14	ton/yr	2.47E-03

*** * aggregate drying: drum-mix plant * ***

The following calculations determine the amount of HAP emissions created by aggregate drying before & after con
based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Table 11.1-10 fo
drum mix dryer which can be fired with either fuel oil or natural gas. The HAP emission factors represent the worst ca
emissions (fuel oil combustion).

Pollutant: Ef lb/ton x 285 / 2000 ton/hr x lb/ton 8760 hr/yr

Hazardous Air Pollutants (HAPs):			Potential To Emit		Limited E
Benzene:	3.90E-04	lb/ton =	0.49	ton/yr	0.49
Ethylbenzene:	2.40E-04	lb/ton =	0.30	ton/yr	0.30
Formaldehyde:	3.10E-03	lb/ton =	3.87	ton/yr	3.87
Hexane:	9.20E-04	lb/ton =	1.15	ton/yr	1.15
2,2,4 Trimethylpentane:	4.00E-05	lb/ton =	0.05	ton/yr	0.05
Methyl chloroform:	4.8E-05	lb/ton =	0.06	ton/yr	0.06
Toluene:	2.90E-03	lb/ton =	3.62	ton/yr	3.62
Total Polycyclic Organic Matter (POM):	8.800E-04	lb/ton =	1.10	ton/yr	1.10
***Xylene:**	2.00E-04	lb/ton =	0.25	ton/yr	0.25
		Total HAPs =	10.88	ton/yr	10.88

*** * summary of source HAP emissions potential to emit * ***

Hazardous Air Pollutants (HAPs):

Arsenic:	**0.002**	ton/yr
Benzene:	**0.487**	ton/yr
Beryllium:	**0.002**	ton/yr
Cadmium:	**0.002**	ton/yr
Chromium:	**0.002**	ton/yr
Ethylbenzene:	**0.300**	ton/yr
Formaldehyde:	**3.870**	ton/yr
Hexane:	**1.148**	ton/yr
2,2,4 Trimethylpentane:	**0.050**	ton/yr
Lead:	**2.144**	ton/yr
Manganese:	**0.003**	ton/yr
Mercury:	**0.002**	ton/yr
Methyl chloroform:	**0.060**	ton/yr
Nickel:	**0.002**	ton/yr
Selenium:	**0.008**	ton/yr
Toluene:	**3.620**	ton/yr
Total POM:	**1.099**	ton/yr
Xylene:	**0.250**	ton/yr
Total:	**13.048**	**ton/yr**

*** * summary of source HAP limited emissions * ***

Hazardous Air Pollutants (HAPs):

Arsenic:	**0.000**	ton/yr
Benzene:	**0.487**	ton/yr
Beryllium:	**0.000**	ton/yr
Cadmium:	**0.000**	ton/yr
Chromium:	**0.000**	ton/yr
Ethylbenzene:	**0.300**	ton/yr
Formaldehyde:	**3.870**	ton/yr
Hexane:	**1.148**	ton/yr
2,2,4 Trimethylpentane:	**0.050**	ton/yr
Lead:	**0.002**	ton/yr
Manganese:	**0.000**	ton/yr
Mercury:	**0.000**	ton/yr
Methyl chloroform:	**0.060**	ton/yr
Nickel:	**0.000**	ton/yr
Selenium:	**0.000**	ton/yr
Toluene:	**3.620**	ton/yr
Total Polycyclic Organic Matter:	**1.099**	ton/yr
Xylene:	**0.250**	ton/yr
Total:	**10.885**	**ton/yr**